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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,877	04/09/2004	Satoshi Fujioka	Q81013	9270
23373	7590	08/19/2005	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			COLILLA, DANIEL JAMES	
			ART UNIT	PAPER NUMBER
			2854	

DATE MAILED: 08/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/820,877

Applicant(s)

FUJIOKA ET AL.

Examiner

Daniel J. Colilla

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) 28-36 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26 is/are allowed.
- 6) ☒ Claim(s) 1-2, 6-8, 10-11, 12/1, 12/2, 16, 17, 21, 23 and 24-27 is/are rejected.
- 7) ☒ Claim(s) 3-5, 9, 12/3-12/5, 13-15, 18, 19, 20 and 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 10/041,669.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>4/9/04, 7/22/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-27 in the reply filed on 6/9/2005 is acknowledged.

Claim Objections

2. Claims 8, 17, 23 and 25 are objected to because of the following informalities:
 - In claim 8, lines 2-3, it appears that applicant intends to mean --operable by a user-- rather than "operable for a user."
 - In claim 17, line 2, the phrase "operable for by a user" does not make sense. It would appear that applicant intends to mean --operable by a user--.
 - In the last line of claim 23, it appears that "shatter" should actually be --shutter--.
 - In the second to last line of claim 25, there appears to be language missing from the phrase "an operable."

Appropriate correction is required.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground

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provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-27 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,921,163. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of U.S. Patent No. 6,921,163 recites all the structure that is recited in claim 1 of the present application.

Similarly, each of claims 2-23 of U.S. Patent No. 6,921,163 recites all the structure in each of claims 2-23 of the present application respectively.

Each of claims 24-25 of U.S. Patent No. 6,921,163 recites all the structure in each of claims 26-27 of the present application respectively.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear what applicant intends to mean by "multi-step." In the application applicant does not appear to expand on what is meant by the term "multi-step" with reference to changing the sucking force except for giving an example that it may be three steps.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1, 2, 16, 17, 21, 23 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Endo (JP 2000-318870).

With respect to claim 1, Endo discloses a recording apparatus which records data on a recording medium comprising:

a suction unit (a platen 62 equipped with vacuum chamber 72 and vacuum fan 74) for sucking a recording medium (sheet body 56) which has passed in a recording unit(print head 54), said suction unit having a plurality of suction ports (73) in a transporting direction of the recording medium (see Figs. 1 and 2; paragraph [0032]).

Endo further discloses that when the recording medium is not transported on the suction unit, the suction ports are closed (chambers 78-84 are closed by shutters 86), and when the recording medium is transported on the suction unit, the suction ports are sequentially opened (via chambers 78-84) so as to spread a sucking area on the suction unit in accordance with transportation of a leading end of the recording medium (see paragraphs [0045]-[0050]).

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With respect to claim 2, the limitation, “wherein the suction ports are opened and closed by a shutter” is met by Endo. See shutters (86) closing suction ports (73) by closing chambers (78-84).

With respect to claim 21, the limitation “wherein the sucking area is defined on an area of the suction unit on which the recording medium is actually transported, and all of the suction (holes) ports in the sucking area (is) are opened to suck the recording medium” is met by Endo as it can be seen in Fig. 2 that all of the suction ports (73) in the sucking area defined on an area of the suction unit on which the recording medium (56) is actually transported, are opened to suck the recording medium.

With respect to claim 27, the limitation “wherein the sucking area increases as the sucking area is spread is met by Endo as it can be seen in the drawings that the sucking area (the area corresponding to the chambers (78-84) increases as the sucking area is spread in accordance with transportation of a leading end of the recording medium.

With respect to claim 16, Endo discloses as recording apparatus which records data on a recording medium comprising:

- a plate (76) having a plurality of suction ports (73); and
- a vacuum (72,74) that creates a negative pressure at the suction ports,

wherein the negative pressure at the suction ports is changed by selectively opening and closing the suction ports (see paragraphs [0045]-[0050]).

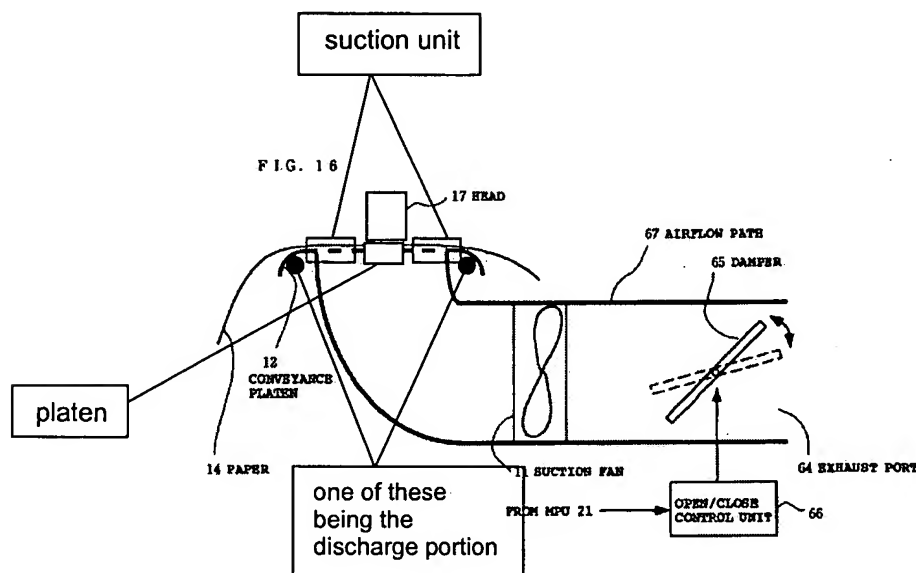
With respect to claim 17, it is submitted that the claimed operation unit operable by a user is inherent in the printing device of Endo in order for the printing device to be operable by a user.

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With respect to claim 23, Endo discloses the claimed recording apparatus. See the combined rejection of claims 1 and 2.

9. Claims 6-8, 10 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Fukuda (US 6,604,820).

With respect to claim 6, Fukuda discloses a recording apparatus including a suction unit positioned between a platen (in this interpretation the platen is the media support surface directly opposite the recording head 17) and a discharge portion as shown below in the Figure taken from Figure 16 of Fukuda:



The platen is opposite a recording head 17 as shown above. It is not known to the examiner which end of the device is the discharge portion, but it inherently must be one of the two areas a shown above. Fukuda further discloses a changing unit 65,66 for changing a sucking force of the

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suction unit in accordance with a property of the recording medium (Fukuda, col. 2, lines 27-32).

With respect to claim 7, the device disclosed above could be operated so that the sucking force becomes larger as the recording medium becomes thicker.

With respect to claim 8, Fukuda discloses an operation unit 51 that is operable by (and for) a user (Fukuda, col. 7, lines 15-23).

With respect to claim 10, the operation unit is capable of performing a number of steps to change the sucking force of the sucking unit. Col. 4, lines 24-37 disclose multiple steps taken to adjust the sucking force of the suction unit.

With respect to claim 11, Fukuda discloses that the recording medium is set when the user enters the information into the operation unit (col. 7, lines 19-37). Thus the operation unit is inherently available when the recording medium is set.

10. Claims 24-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Juan (US 6,234,472).

With respect to claims 24-25, Juan discloses a recording apparatus which records data on a recording medium comprising: a suction unit (vacuum channels 380; vacuum holes 330,350; platen 400) for sucking a recording medium which has passed in a recording unit and a changing means including an operation unit operable by a user (control panel 120) for changing a sucking force of the suction means in accordance with a property of the recording medium, wherein the sucking force of the suction unit is changed so as to become larger as the recording medium

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becomes thicker (see col. 7, lines 50-55 and col. 8, lines 42-48 which show different operational levels of vacuum).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 12/1-12/2 rejected under 35 U.S.C. 103(a) as being unpatentable over Endo (JP 2000-318870) as applied to claims 1-2 above, and further in view of Juan (US 6,234,472).

With respect to claim 12/1, Endo discloses the claimed recording apparatus except for the changing unit. However, Juan discloses changing means including an operation unit operable by a user (control panel 120) for changing a sucking force of the suction means in accordance with a property of the recording medium, wherein the sucking force of the suction unit is changed so as to become larger as the recording medium becomes thicker (see col. 7, lines 50-55 and col. 8, lines 42-48 which show different operational levels of vacuum). It would have been obvious to combine the teaching of Juan with the recording apparatus disclosed by Endo for the advantage of being able to adjust the suction to an optimal level for different types of media that are being recorded.

Allowable Subject Matter

13. Claim 26 is allowed.

14. Claims 3-5, 9, 12/3-12/5, 13-15, 18, 19, 20 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

15. The following is a statement of reasons for the indication of allowable subject matter:

Claims 3 and 12/3 have been indicated as containing allowable subject matter primarily for the cam mechanism that operates and closes the shutter.

Claims 4-5 and 12/4-12/5 have been indicated as containing allowable subject matter primarily for the holes formed on the shutter in accordance with the suction ports.

Claim 9 has been indicated as containing allowable subject matter primarily for the operational unit being constituted by a feeding key in an operation panel.

Claims 13-15 have been indicated as containing allowable subject matter primarily for the suction unit structure which includes a shutter with a plurality of holes corresponding to the suction ports.

Claim 18 has been indicated as containing allowable subject matter primarily for the operation unit being constituted by a feeding key in operation panel.

Claims 19-20 have been indicated as containing allowable subject matter primarily for the shutter having a plurality of holes corresponding to the plurality of ports.

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Claim 22 has been indicated as containing allowable subject matter primarily for the shutter on which a plurality of holes are arranged.

Claim 26 has been allowed primarily for the structure of the suction unit which includes a shutter.

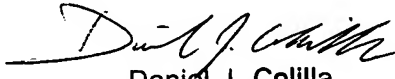
16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yamamoto et al. (JP 5-131692) is cited to show another example of a recording apparatus with suction ports that are sequentially opened. Yamamoto (JP 3-270) is cited to show another example of a recording apparatus in which a changing unit changes the suction in a suction unit based on the type of recording media used.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Colilla whose telephone number is 571-272-2157. The examiner can normally be reached on M-F 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on 571-272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

August 17, 2005


Daniel J. Colilla
Primary Examiner
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